

CITY OF SANTA BARBARA WATERFRONT DEPARTMENT

MEMORANDUM

Date: January 16, 2020
To: Harbor Commission
From: Karl Treiberg, Acting Waterfront Director
Subject: Facilities Management Report

HARBOR DREDGING PROJECTS

1. Federal Channel Dredging

The Army Corps of Engineers (Corps) recently solicited bids for the next three-year dredging contract. Pacific Dredge once again submitted a low bid of just over \$6 million, similar to their 2016 bid. Unfortunately, their bid was protested by the only other bidder. The bid protest was reviewed by attorneys from the Corps' South Pacific Division headquarters in San Francisco. The bid protest was ultimately dismissed but the process took weeks to complete thus delaying fall cycle dredging. Nevertheless, the Corps will proceed with issuing a Notice to Proceed the week of January 13. It typically takes at least two weeks for Pacific Dredge to mobilize, and dredging is expected to begin the first week in February. Harbor Patrol will continue to monitor the channel entrance and place shoal buoys as necessary to mark the navigable channel. "Fall" cycle dredging should take fewer than 10 days to complete removal of 120,000 c.y. of sand.

2. Interior Harbor Dredging

Dredging was recently completed between Marina One and the breakwater. Using a submersible pump loaned to the Waterfront by Port San Luis, several shoals along the north side of the breakwater were recently removed. The shoals gradually built over the past decade, incrementally impeding navigation in this area. The pump was deployed from the utility vessel, *Danny C*, with the sand being discharged through a pipe suspended over the breakwater by a forklift. This method is efficient and relatively inexpensive compared to conventional dredging techniques. Port San Luis has been generous sharing their knowledge and equipment for a variety of unique marine construction projects.

MARINA FOUR PILE DRIVING

Floating docks in marinas are typically secured by guide piles attached to the dock. The majority of the marinas in Santa Barbara Harbor have double-wide slips allowing two boats to tie up with a finger dock on one side of each boat. For longer slips, a mooring pile is located between the boats to provide another mooring point. This is especially important for the longer slips containing larger boats with bigger loads on the docks. The

slips at Marina 4B finger are 51' long, some of the longest in the harbor. Not only do the larger boats put extreme loads on the finger docks, Marina 4B is directly exposed to wave and wind energy during southeast conditions. The mooring piles are especially important in this location to secure the large boats.

A large portion of Marina 4B was rebuilt after the 1983 El Niño, well known for its extremely large waves and damaging conditions. The mooring piles in this location are wood (guide piles are concrete) and of unknown origin. Last year, the mooring pile at Marina 4B slip 46/48 broke, and was eventually cut off a few feet above the mudline. Previously, replacing any pile in a marina would require mobilization of a barge mounted crane with pile driving equipment to Santa Barbara Harbor costing upwards of \$30,000. Often times, missing marina piles are not replaced until there are several missing piles or a separate pile driving project is scheduled. Unfortunately, this was unacceptable for Marina 4B, considering the size of the boats and exposure to southeast storm conditions.

As part of our continued collaboration with Port San Luis, staff recently conducted a site visit to observe pile replacement on the Hartford Pier. Port San Luis is capable of driving piles with a pneumatic pile driver deployed from a forklift. The pile driver is relatively small and staff realized that it could possibly be deployed from the utility vessel, *Danny C*. Arrangements were made to borrow the pile driving concurrent with the submersible pump used to dredge between Marina One and the breakwater. The *Danny C* is equipped with a 10 ton crane and although its lifting capacity is considerably less than a barge mounted crane, it was adequate to deploy Port San Luis's pile driver.

Since the mooring pile isn't attached to anything, staff built a frame attached to the finger docks as a guide to drive the new mooring pile. The old pile stub was jettied out with the exact location of the removed pile marked by divers. The *Danny C* was able to hoist a 45' wood pile and place it in the exact location of the old pile secured by the frame built by staff. The pneumatic pile driver was then placed on the new pile and it only took a few minutes to drive the pile to the proper depth. This was the first time this method of pile driving was used in the harbor, greatly expanding our ability to replace marina piles at a fraction of the cost compared to conventional methods.

UNDERGROUND STORAGE TANK REPLACEMENT PROJECT

At the October 2019 Harbor Commission meeting, staff reported on the status of the proposed Underground Storage Tank (UST) Replacement Project. Santa Barbara Fuel Dock, Inc. is responsible for replacing the USTs located in Harbor Way and has worked diligently on finalizing the replacement plan and obtaining the required approvals from the City and County of Santa Barbara. The project was originally scheduled to begin in October 2019 but was delayed due to finalizing shoring plans and obtaining final approvals/permits. As of October, the contractor estimated UST installation would begin in late March 2020.

Santa Barbara Fuel Dock, Inc. received their final approvals/permits last week. Lead time for tank fabrication is 4 – 6 weeks and now UST installation is tentatively scheduled to begin in mid-February. This is desirable for a variety of reasons, most notably the reduced activity in the harbor commercial area in winter. Nevertheless, several tenants have scheduled improvements concurrent with the UST installation and coordination of these efforts is under way with an exact start date to be determined.

Staff and the UST contractor have identified the location and limits of the construction site and staging areas in Harbor Way. Another meeting will be held with harbor commercial area tenants before construction begins, to obtain feedback on the Sign Plan and provide them with a more detailed construction schedule. Despite delays obtaining the final approvals, the UST contractor believes the major construction activities (removal and installation of USTs) will be completed in four weeks, essentially returning Harbor Way to business as usual by mid-March.

Prepared by: Karl Treiberg, Acting Waterfront Director